

WYOMING OIL & GAS
CONSERVATION COMMISSION



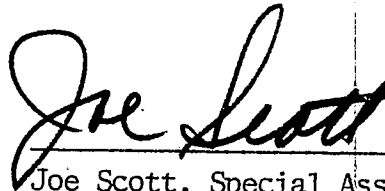
APPLICATION FOR PRIMACY
IN THE REGULATION OF
CLASS II INJECTION WELLS
UNDER SECTION 1425 OF THE
SAFE DRINKING WATER ACT

NOVEMBER 11, 1981

Office of State Oil & Gas Supervision
123 State Office Building
P.O. Box 26419
Cheyenne, Wyoming

STATEMENT OF LEGAL AUTHORITY

I, Joe Scott, am a Special Assistant Attorney General for the State of Wyoming. My duties include representing the Wyoming Oil and Gas Conservation Commission. I have reviewed the program description for the Underground Injection Control Program and the regulations and statutes of the Wyoming Oil and Gas Conservation Commission. I certify that these statutes and regulations give the Wyoming Oil and Gas Conservation Commission adequate authority to carry out the Underground Injection Control Program for Class II Wells under under Section 1425 of the Safe Drinking Water Act.

A handwritten signature in cursive script, reading "Joe Scott", is written over a horizontal line.

Joe Scott, Special Assistant
Attorney General for the
State of Wyoming

STATE REVIEW OF REGULATIONS AND STATUTES RELEVANT TO
UIC PROGRAM--CLASS II WELLS *

I

Introduction

42 USC §300h-4 deals with a method by which a state may seek primacy and administer its own program of underground injection control (UIC). In order to do so, it must obtain approval of its program by the Administrator of the Environmental Protection Agency of the United States. The State of Wyoming desires to seek primacy and administer the UIC program. The Wyoming Oil and Gas Conservation Commission (WOGCC), an administrative agency of the State of Wyoming, is the agency that will administer the portion of the program dealing with Class II injector wells, which are wells for injection of fluid brought to the surface in connection with oil and gas production, underground injection for secondary or tertiary recovery, and injection for storage of hydrocarbons that are liquid at standard temperature and pressure. Accordingly, WOGCC is in the process of preparing an application for primacy under 42 USC §300h-4, also known as § 1425 of the Safe Drinking Water Act. That application must demonstrate that the State program will meet the requirements of 42 USC §300h-1(b)(1)(A,B,C, and d) and represents an effective program, including record-keeping and reporting, to prevent underground injection which endangers drinking water sources. The purpose of this document is to consider whether the current statutes and regulations of the WOGCC are adequate to do this, and, if not, what changes are necessary.

II

1421(b)(1) A

42 USC §300h-1(b)(1)(A)

42 USC §300h-1(b)(1)(A) requires that the State program prohibit any underground injection that is not authorized by a permit or rule. §30-5-104(d)(ii)¹ provides that WOGCC has authority to regulate "for conservation purposes" the drilling, producing, and plugging of wells;

¹ All statutory references are to Wyoming Statutes Annotated, 1977 and subsequent amendments unless specified otherwise.

*This document was prepared prior to the adoption of amended rules in Docket 222-81. It appears in this submittal as a clarification of the program.

The State Oil and Gas Supervisor is the Executive Director of WOGCC and has the duty of enforcing its statutes and rules, overseeing the daily operations of the staff, and performing such other duties as are delegated to him by the Commission.

²All rule references are to the Rules and Regulations of WOGCC unless specified otherwise.

(a)(i)(C), waste is defined to include the inefficient storing of oil or gas and gas and charges WOGCC with the duty of preventing waste. In 30-5-101 streams contained in Rule 326, supra. 30-5-102 prohibits the waste of oil general provision that the producer shall not pollute underground water and addressed in the WOGCC's rules. However, it would be included in the The matter of underground storage of hydrocarbons is not explicitly

by the rule.

Even when a permit is not required, the operation would still be governed underground water. This would be the criteria in granting any permit. This rule also provides that the oil producer shall not pollute streams or

"If useless liquid products of wells cannot be treated or destroyed or if the volume of such products is too great for disposal by usual methods without damage, the Supervisor must be consulted and the useless liquids disposed of by some method approved by him."

liquid waste is covered by Rule 326. It provides the following: irrigation, or general uses obtain a permit to do so. Disposal of other salt water, brackish water, or other water unfit for domestic, livestock, Rule 336 requires that a person desiring to dispose underground of or cemented so that it will not cause damage to fresh water sources.

tents of the application. Rule 403 requires that injector wells be set make a proper application for that approval or order and specifies the connection with same, is permitted only on order of the WOGCC or on approval of the Oil and Gas Supervisor.³ The rule goes on to state that one must

the extraction and separation of liquid hydrocarbons from natural gas in energy into a pool, repressuring, cycling or recycling operations, including recovery operations involving the introduction of extraneous forms of Rule 401² states that waterflooding and other secondary and tertiary or the introduction of extraneous forms of energy into a pool.

ments for secondary and tertiary recovery including waterflooding underground water. 30-5-110 gives WOGCC authority to approve unit agreement nonpotable water, and oil field wastes; and the contamination of waste of the shooting and chemical treatment of wells; the disposal of salt water,

Finally, it might be noted that Rule 307 provides a procedure for modifying previously granted permits when an unanticipated change in plans occurs. When "any material change" in previously approved plans is needed, complete details of the change must be submitted to the Supervisor. He must give his approval before the change is put into operation.

As the foregoing demonstrates, all three types of Class II injections-- disposal of liquid well products, injection for enhanced recovery, and storage--are covered by the statutes and rules of WOGCC. These rules and statutes either require a permit or specify the terms under which underground injections can occur. Furthermore, a mechanism exists whereby permits may be modified if the planned operation undergoes a significant change.

III

42 USC §300h-1(b)(1)(B)

42 USC §300h-1(b)(1)(B) provides the State program must require that the applicant for a permit prove that the contemplated underground injection will not endanger drinking water sources and the program must not allow promulgation of a rule that authorizes underground injection that endangers drinking water sources.

30-5-104 (c) gives WOGCC authority to make rules and regulations and issue orders, and take appropriate actions to carry out the purposes and intent of the Wyoming Oil and Gas Conservation Act. 30-5-104 (d)(i)(C) authorizes WOGCC to require the drilling, casing, and plugging of wells in such a manner as to prevent: the escape of oil or gas from one stratum to another, the intrusion of water into an oil or gas stratum, blowouts, seepages, and cavings, and the pollution of fresh water supplies by oil, gas or salt water. 30-5-104 (d)(ii) authorizes the WOGCC "to regulate for conservation purposes" the drilling, producing, plugging, shooting, and chemical treatment of wells; and the disposal of salt water, nonpotable water, and oil field wastes; and the contamination or waste of underground water. Thus, the WOGCC's rule-making authority of 30-5-104 (c) is qualified by 30-5-104 (d). Its regulatory power under 30-5-104 (d)(ii) is modified by the phrase "for conservation purposes." Conversely, there is nothing

in the oil and gas statutes to authorize the pollution of water should WOGCC, for example, determine the circumstances make it necessary. From the foregoing, it appears that WOGCC would not have authority to adopt a rule that endangers or allows pollution of drinking water sources.

Pursuant to the foregoing statutes, the WOGCC has adopted Rule 326. It governs all phases of oil and gas production, including those involved in Class II wells, and states that the oil producer is not to pollute streams and underground water. Thus, injections that would endanger drinking water supplies would not be permitted. As noted, this would apply to injections authorized by rule and would be the criteria in granting permits where injections are authorized by permit. Furthermore, all operations must be conducted in a workmanlike manner, Rule 328.

Rule 336 specifies the information that the applicant for a permit to dispose of waste water must provide to WOGCC or the Supervisor. This includes the following:

- A. A plat showing the location of the disposal well or wells, including abandoned and drilling wells and dry holes, and the names of all working interest owners within one-half mile from the proposed disposal well or wells;
- B. The names, description and depth of the formation into which water is to be injected, including a mechanical log of the proposed disposal well or wells, if one is available;
- C. A description of the casing in the disposal well or wells, or the proposed casing program and the proposed method for testing casing before use of the disposal well or wells;
- D. A statement specifying the source of the water to be injected;
- E. The estimated minimum and maximum amount of water to be injected daily;

This rule also requires that the well be cased and cemented in a manner that will not cause damage to fresh water sources, oil, and gas.

The contents of an application for a permit for an injection for secondary or tertiary recovery are specified in Rule 401. Such an application must contain the following:

- A. A plat showing the area involved together with the well or wells including drilling wells, dry and abandoned wells located thereon, all properly designated;
- B. A full description of the particular operation for which approval is requested;

- C. The pools from which wells are producing or have produced;
- D. The names, description and depth of the pools or pools to be affected;
- E. The log of the injection well or wells, or such information with respect thereto as is available;
- F. A description of the injection well's casing, or the proposed casing program, and the proposed method for testing casing before use of the injection wells;
- G. A statement as to the type of fluid to be used for injection, its source, and the estimated amounts to be injected daily;
- H. The name and address of the operator or names and addresses of the operators of the project.

Rule 403 requires that the injector well for enhanced recovery be cased and cemented so that fresh water sources, oil and gas will not be damaged.

Though not expressed in Rules 336 and 401, it has been the practice of WOGCC to require an analysis of water to be injected and of the formation water be submitted as part of the application.

Rule 326 requires an operator who can not dispose of liquid waste "by usual methods without damage" to consult the Supervisor and get his approval for the proposed disposal method.

§ 5.3 of GUIDANCE FOR STATE SUBMISSIONS UNDER SECTION 1425 OF THE SAFE DRINKING WATER ACT (Guidance) states that an application for a permit for underground injection should include the following information:

- a. A map showing the area of review and identifying all wells of public record penetrating the injection interval;
- b. A tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data should include a description of each well's type, construction, date drilled, location, depth, record of plugging and/or completion, and any additional information the Director may require;
- c. Data on the proposed operation, including:
 - 1. Average and maximum daily rate and volume of fluids to be injected;
 - 2. Average and maximum injection pressure; and
 - 3. Source, and an appropriate analysis of injection fluid if other than produced water, and compatibility with the receiving formation;
- d. Appropriate geological data on the injection zone and confining zones including lithologic description, geological name, thickness, and depth;
- e. Geologic name, and depth to bottom of all underground sources of drinking water which may be affected by the injection;

42 USC 300h-1 (b)(1)(C) requires that a State program provide for inspection, monitoring, recordkeeping, and reporting. 30-5-104 (b) gives WOGCC the authority and duty to make investigations to determine whether "facts exist which justify or require action by it," and authorizes it to hold investigatory hearings. 30-5-104 (d) gives WOGCC authority to require "the making and filing of reports." These requirements are amplified by the rules. Rule 207 gives the Supervisor authority to require the making of any test or survey deemed necessary to carry out the purposes of the Oil and Gas Conservation Act. Rule 205 provides the Supervisor and the staff "shall have access to all well records wherever located," and have authority to enter upon any lease or property and inspect the record and operation of such well. It also provides for confidentiality of information obtained thereby. Rule 310 requires

42 USC 300h-1 (b)(1)(C)

IV

Rules 326, 336, and 401 require some information in the application that is not specified and fails to require some information that is specified in § 5.3 of Guidance. It may be necessary to amend these rules to require the information specified in § 5.3 of Guidance. On the other hand, some of the information required in the rules and not § 5.3 of Guidance, such as casing and cementing information, is important and should continue to be provided in the application. Finally, it might be noted that Rule 315 requires that oil wells be plugged according to the requirements of the Supervisor and in a manner sufficient to protect fresh water supplies. Under Rules 312 and 314 one must obtain permission to abandon a well from the Supervisor, provide details as to how one plans to conduct the operation, and, subsequently, report on how it was actually done.

- f. Schematic drawings of the surface and subsurface construction details of the system;
- g. Proposed stimulation program;
- h. All available logging and testing data on the well; and
- i. The need for corrective action on wells penetrating the injection zone in the area of review.

the monthly filing of "a report of all oil, water, and gas production and injection" on an individual well basis. A change in well ownership must be reported pursuant to Rule 311. Rule 312 requires a producer to give notice of his intention to abandon a well, provide certain relevant information therein, and obtain the approval of the Supervisor. After the work is done and the well is plugged (if suitable for water use, it may be turned over to the land owner upon approval of the Supervisor) and abandoned the producer must report to the Supervisor the details of how the operation was actually done pursuant to Rule 314. This rule also requires that cementing records be kept for one year following abandonment and transmitted to the Supervisor upon his request. Under Rule 315, all wells must be plugged according to the requirements of the Supervisor, and in a manner sufficient to protect all fresh water. Rule 318 imposes other record keeping requirements:

"The owner shall keep on the leased premises, or at his headquarters in the field, or otherwise conveniently available to the Supervisor, accurate and complete records of the drilling, redrilling, deepening, repairing, plugging or abandoning of all wells, and of all other well operations, and of all alterations to casing. These records shall show all the formations penetrated, the content and quality of oil, gas or water in each formation tested, and the kinds, weight, size and landed depth of casing used in drilling each well on the leased premises, and any other information obtained in the course of the well operations."

Well logs must be filed under Rule 319. Notice of the actual commencement and discontinuance of injection operations and of the plugging of the well must be given to the Supervisor under Rule 404. Any time an operator injects any substance into the pool for any purpose, he must report to the Supervisor the amount, type, and source of the injected substance and the injection pressure pursuant to Rule 405. Except for personal injuries and deaths, the operator must notify the Supervisor of all accidents within twenty-four hours of their occurrence and submit a full report on same within fifteen days.

The foregoing appears to be ample provision for reporting record keeping, inspection, etc. It meets all the requirements of § 5.4 of Guidance with the possible exception of a failure to specify the frequency of some reports and the duration that certain records must be kept. However, WOGCC Form 5, on which subsurface injections are reported, states the form must be filed at least every six months. Amendment of the rules to specify the frequency, if necessary, should be no problem.

42 USC 300h-1 (b)(1)(D)

42 USC 300h-1 (b)(1)(D) requires that the State program have authority to regulate injection by federal agencies and on property owned or leased by the United States. § 5.5 of Guidance states that it is not necessary that Indian land be covered. At the outset, WOGCC wishes to state it does not wish to apply its program to Indian land.

*Indian
Land
Definition*

The extent of the application of the Oil and Gas Conservation Act is in 30-5-118. It reads as follows:

"The state of Wyoming being a sovereign state and not disposed to jeopardize or surrender any of its sovereign rights, this act shall apply to all lands in the state of Wyoming lawfully subject to its policy powers; provided, it shall apply to lands of the United States or to lands subject to the jurisdiction of the United States only to the extent that control and supervision of conservation of oil and gas by the United States on its lands shall fail to effect the intent and purposes of this act and otherwise shall apply to such lands to such extent as an officer of the United States having jurisdiction, or his duly authorized representative, shall approve any of the provisions of this act or the order or orders of the commission which affects such lands; and, furthermore, the same shall apply to any lands committed to a unit agreement approved by the secretary of the interior or his duly authorized representative, except that the commission may, under such unit agreements, suspend the application of this act or any part of this act so long as the conservation of oil and gas and the prevention of waste as in this act provided is accomplished thereby but such suspension shall not relieve any operator from making such reports as are necessary or advised to be fully informed as to operations under such agreements and as the commission may require under this act."

The Oil and Gas Conservation Act and the WOGCC's jurisdiction would apply to federal land under the following circumstances: the federal government fails to carry out the intent of the oil and gas law, federal land committed to a unit agreement, and whenever the United States consents to the application of the Wyoming Oil and Gas Conservation Act and WOGCC jurisdiction. Insofar as the Safe Drinking Water Act provides for state administration of a UIC program and, as a condition thereof, requires that such a program apply to all land owned by the United States or its agencies, it is contradictory and defies any common sense interpretation to say that the United States has not consented to the applicability of the Wyoming Oil and Gas Conservation Act and WOGCC jurisdiction. Furthermore, 42 USC 300j-6 provides every federal agency engaged in underground injection must comply with federal, state, and local requirements and any underground injection control program to the same extent as a non-government entity. Thus, the requirements of 42 USC 300h-1 (b) (1)(D) are met.

42 USC 300h-4 (a) and Miscellaneous

42 USC 300h-4 (a) requires that a state UIC program "represents an effective program (including adequate record keeping and reporting) to prevent underground injection which endangers drinking water sources.

As the foregoing demonstrates, there is an adequate statutory framework and adequate regulations for an underground injection control program for Class II wells in Wyoming. WOGCC has been administering such a program for many years without problem. There are several miscellaneous statutes and regulations that augment the program's effectiveness, and they should be noted.

If the WOGCC finds an emergency requiring immediate action to exist, it may issue an emergency order without notice or hearing. Such an order is effective for up to fifteen days, 30-5-111 (c). WOGCC is empowered to act on its own motion or upon the petition of any interested party, 30-5-111 (h). WOGCC has subpoena power over people, records, and documents. When this power is exercised, the statutes provide for immunity to a "natural person," so the right against self-incrimination is not a problem, 30-5-112 (a). 30-5-114 empowers the WOGCC to sue in district court to temporarily or permanently enjoin violations or threatened violations of the Oil and Gas Conservation Act, its rules, and orders.

Various penalties for violation of the Oil and Gas Conservation Act and WOGCC rules and orders are provided by law. Under 30-5-119 (e), a person or corporation who violates the Oil and Gas Conservation Act or the rules or orders of WOGCC, the Supervisor, or his assistants is subject to imprisonment in the county jail for up to six months and/or a fine of up to \$500.00. This is in addition to a civil penalty of up to \$500.00 for each violation after actual or constructive notice of the Oil and Gas Conservation Law. This penalty may be assessed by WOGCC. If the violation occurs knowingly and willfully after actual notice from WOGCC or its staff, the violator is subject to a civil penalty of up to \$1,000.00 for each violation and for each day the violation continues, 30-5-119 (a). A person who, for the purpose of evading a statute, rule, or order of WOGCC,

makes a false report, omits true information from a report, or removes or destroys records, is subject to a fine of up to \$5,000.00 and imprisonment up to six months, or both, 30-5-119 (b). These penalties cover aiders and abettors as well, 30-5-119 (c), and are cumulative and in addition to any other penalty or remedy provided by law, 30-5-119 (f). Furthermore, nothing in the oil and gas statutes is to impair or abridge any cause of action accruing to an individual because of violations of the statutes, rules, or orders of WOGCC, 30-5-112 (b).

Procedurally, WOGCC is governed by the Wyoming Administrative Procedure Act, 9-4-101, et seq., and various statutes and regulations of its own. Judicial review may be sought in the district court with right of appeal to the Wyoming Supreme Court.

Hearings are to be held before the Commission if it desires to hear the matter, if the motion or application so requests, if the matter is for enforcement of a rule, order, or statutory provision, if an affected party so requests, or to amend a rule, 30-5-106. Matters may be handled administratively, in other words, without a hearing, if, after notice of the filing of the application to interested parties, no one objects. Here, it might be noted that the Wyoming Department of Environmental Quality (DEQ) and the Wyoming State Engineer, who is in charge of the state's water, receive notice of the filing of injector well applications and a copy thereof, and are given an opportunity to object, pursuant to an agreement between them and WOGCC reached in August, 1980.

Finally, it might be noted that all operators are required to post a bond with WOGCC, Rule 304. The bond is in the amount of \$5,000.00 for wells less than 2,000 feet and \$10,000.00 for wells over 2,000 feet, or, an operator may post a blanket bond of \$25,000.00 for all wells in the state. The bonds covering fee lands are on WOGCC Forms 8 and 8A, and are conditioned on the operator complying "with all the provisions of the oil and gas conservation laws of the State of Wyoming and the rules, regulations and orders of the Wyoming Oil and Gas Conservation Commission made pursuant thereto, and the orders of the Wyoming Oil and Gas Supervisor or his duly authorized representatives, with reference thereto." Similar bonds covering state and federal land are required by the State Commissioner of Public Lands and the federal government, respectively.

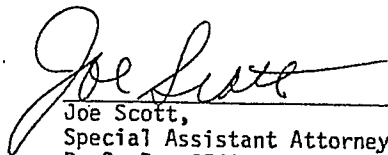
The foregoing is a thorough system for the protection of underground drinking water from pollution from underground injection in connection with the production of oil and gas.

VII

Conclusion ⁴

WOGCC has numerous other statutes and regulations intended to protect the environment from pollution due to oil and gas production. This paper has attempted to deal only with those related to the requirements of the Safe Drinking Water Act's UIC program for Class II injector wells. A booklet containing the actual text of all the statutes and regulations of WOGCC and its reporting forms is provided with this document. A statutory framework and regulations exist for an effective UIC program that will meet the requirements of 42 USC 300h-1 (b)(1)(A-D) and 42 USC 300h-4. At most, a few minor amendments of the regulation filling in certain details is all that should be necessary. No statutory changes are needed.

The Wyoming Oil and Gas Conservation Commission eagerly awaits the response of the Environmental Protection Agency to this document, and any suggestions it may have regarding the adequacy of the foregoing statutes and rules and the necessity of amendments, in light of the requirements of the Safe Drinking Water Act's UIC program for Class II injector wells.


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⁴By now the reader may have noted an absence of citations to case law interpreting the above statutes and rules. This is for the simple reason that litigation has been rare and there are no reported cases.